Title (en)

HIGH RESOLUTION SURFACE PLASMON RESONANCE INSTRUMENT USING A DOVE PRISM

Title (de)

HOCHAUFLÖSENDES OBERFLÄCHENPLASMONEN-RESONANZINSTRUMENT MIT EINEM DOVE-PRISMA

Title (fr)

INSTRUMENT DE RÉSONANCE PLASMONIQUE DE SURFACE HAUTE RÉSOLUTION UTILISANT UN PRISME DE DOVE

Publication

EP 2335050 A4 20140115 (EN)

Application

EP 09817147 A 20090930

Priority

- CA 2009001389 W 20090930
- US 13674308 P 20080930

Abstract (en)

[origin: WO2010037227A1] A surface plasmon resonance instrument and measuring method, in which a lens collimates light into a light beam, a prism propagates the collimated light beam at a single propagation angle and with internal reflection on a face of the prism, and an analyzer processes the collimated light beam from the prism. The face of the prism is configured to receive a surface plasmon resonance sensor and at least the first lens and the prism are aligned on a single optical axis.

IPC 8 full level

G01N 21/55 (2006.01); **G02B 5/04** (2006.01)

CPC (source: EP US)

G01N 21/553 (2013.01 - EP US); **G02B 5/04** (2013.01 - EP US)

Citation (search report)

- [XY] US 2006210436 A1 20060921 - SHENOY DEVANAND K [US]
- [XYI] US 6570657 B1 20030527 - HOPPE LUTZ [DE], et al
- [Y] US 2003219809 A1 20031127 - CHEN SHEAN-JEN [TW], et al
- [XY] WONG C L ET AL: "Optical characterization of elastohydrodynamic lubricated (EHL) contacts using surface plasmon resonance (SPR) effect", TRIBOLOGY INTERNATIONAL, BUTTERWORTH SCIENTIFIC LDT, GUILDFORD, GB, vol. 41, no. 5, 7 November 2007 (2007-11-07), pages 356 - 366, XP022434044, ISSN: 0301-679X, DOI: 10.1016/J.TRIBOINT.2007.09.006
- [XYI] THARIANI R: "Novel, high-quality surface plasmon resonance microscopy", SENSORS AND ACTUATORS B: CHEMICAL: INTERNATIONAL JOURNAL DEVOTED TO RESEARCH AND DEVELOPMENT OF PHYSICAL AND CHEMICAL TRANSDUCERS, ELSEVIER S.A, SWITZERLAND, vol. 130, no. 2, 21 February 2008 (2008-02-21), pages 765 - 770, XP022550397, ISSN: 0925-4005
- [IY] LEE H J ET AL: "Quantitative functional analysis of protein complexes on surfaces", THE JOURNAL OF PHYSIOLOGY, vol. 563, no. 1, 21 December 2004 (2004-12-21), pages 61 - 71, XP055044430, ISSN: 0022-3751, DOI: 10.1113/jphysiol.2004.081117
- [IY] YUK J S ET AL: "Analysis of protein arrays with a dual-function SPR biosensor composed of surface plasmon microscopy and SPR spectroscopy based on white light", SENSORS AND ACTUATORS B: CHEMICAL: INTERNATIONAL JOURNAL DEVOTED TO RESEARCH AND DEVELOPMENT OF PHYSICAL AND CHEMICAL TRANSDUCERS, ELSEVIER S.A, SWITZERLAND, vol. 129, no. 1, 26 July 2007 (2007-07-26), pages 113 - 119, XP022424853, ISSN: 0925-4005, DOI: 10.1016/J.SNB.2007.07.089
- [XP] BOLDUC O R ET AL: "High-resolution surface plasmon resonance sensors based on a dove prism", TALANTA, ELSEVIER, AMSTERDAM, NL, vol. 77, no. 5, 17 October 2008 (2008-10-17), pages 1680 - 1687, XP025874785, ISSN: 0039-9140, [retrieved on 20081017], DOI: 10.1016/J.TALANTA.2008.10.006
- See references of WO 2010037227A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

WO 2010037227 A1 20100408; CA 2738688 A1 20100408; CN 102227626 A 20111026; EP 2335050 A1 20110622; EP 2335050 A4 20140115; US 2011310383 A1 20111222; US 8982353 B2 20150317

DOCDB simple family (application)

CA 2009001389 W 20090930; CA 2738688 A 20090930; CN 200980147745 A 20090930; EP 09817147 A 20090930; US 200913121603 A 20090930